5. (Amended) A composition of matter according to claim 1 having a density between about 0.45 and 0.55 g/cm^3, wherein the compressed fibrous plant materials have a length of at least about 3 cm and comprise between about 55% to 80% by weight of the composition of matter.

6. (Amended) A blended feed adapted for feeding to ruminant livestock comprising the composition of matter of claim 1, and other feed materials, wherein at least 15% by weight of the blended feed comprises said composition of matter.

7. (Amended) An apparatus adapted to compress fibrous plant materials to form compressed solid feed, comprising:

at least one die comprising a plurality of raw material receiving spaces each having an inlet and an outlet, wherein the raw material receiving spaces have a tapered shape in which the inlet is wider than the outlet and the raw material receiving spaces are adapted to receive the fibrous plant materials, and

a plurality of pushing rods disposed opposite to the inlets of the raw material receiving spaces, the pushing rods being adapted to compress the fibrous plant materials by reciprocating relative to the dies along a longitudinal

direction of the inlets and outlets of the raw material receiving spaces.

11. (Amended) A method according to claim 10, wherein after the compression step at least 20% by weight of the compressed solid feed comprises fibrous plant materials having a length of at least 3 cm and the compressed solid feed has a density of between about 0.4 and 0.6 g/cm^3.